

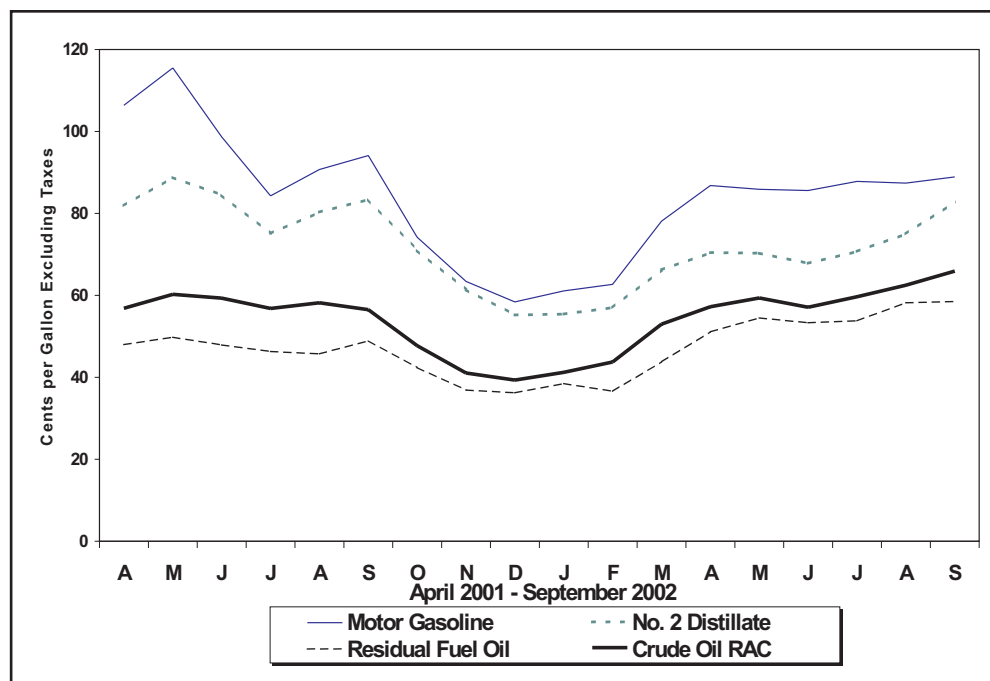
Highlights

Supported by a number of factors, world crude oil prices increased during September. Rising prices were underpinned by production and supply issues, and mounting concern that the United States was closer to taking military action against Iraq. According to some market watchers, the so-called “war premium,” which is based on fears of a military conflict in the Middle East, has affected prices for the past several months. As tensions in the region, in particular between the U.S. and Iraq rise or abate, crude oil prices are affected. In the face of those issues, Iraqi diplomatic efforts with the United Nations to avoid an invasion by U.S. military forces helped lead prices lower during the initial days of the month. At the same time, the release of data showing the largest amount of production overruns by members of the Organization of Petroleum Exporting Countries (OPEC) since the group agreed to impose production limits on itself added additional pressure. The direction of prices changed quickly however, upon the release of data on September 5 showing a sharp decline in U.S. crude oil stocks. Also on September 5, U.S. and British warplanes attacked Iraqi targets in the “no-fly” zone, exacerbating market concerns of a full-scale invasion of Iraq by U.S. forces. On September 19, OPEC members voted to maintain current production quotas during a meeting in Osaka, Japan. The group’s decision to stay the current course came despite calls from some that production should be increased now to prevent short falls in supplies and accompanying price spikes. However, market reaction to the decision was minimal, due to greater interest in developments in the U.S./Iraq situation. Prices remained in a dynamic mode during the ensuing

weeks of September, again due to the politically charged atmosphere in world markets, but also to tropical storms in the Gulf of Mexico which threatened production and supply facilities in the region.

In the United States, prices for crude oil and refined products followed mostly smooth, and moderately ascendant paths in most regional markets during September. Refining margins widened from the constricted levels seen last month, as prices for refined products underwent steeper increases than crude oil. Despite robust demand, supplies of gasoline remained comfortable throughout the summer driving season, thus tempering the course of the product’s prices. High import levels throughout the summer contributed to this situation. Distillate prices in West Coast and Mid-western markets declined as production and supplies increased. Tropical Storm Isidore affected delivery systems and refinery operations on the Gulf Coast dur-

Figure HL1. Crude Oil and Petroleum Product Wholesale Prices



Sources: Energy Information Administration. Crude oil refiner acquisition cost: Form EIA-14, “Refiners’ Monthly Cost Report”; petroleum product prices: Form EIA-782A, “Refiners’/Gas Plant Operators’ Monthly Petroleum Product Sales Report.”

Table HL1. U.S. Refiner Prices and Volumes of Petroleum Products

(Prices: Cents per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

Products	Sales to End Users						Sales for Resale					
	September 2002		August 2002		September 2001		September 2002		August 2002		September 2001	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor Gasoline	100.1	62.3	100.1	66.6	109.2	62.2	88.9	303.4	87.4	332.3	94.1	301.5
Conventional	97.2	36.3	96.7	39.5	107.0	36.5	85.8	201.5	83.9	224.3	91.2	200.5
Regular	94.1	27.5	93.6	30.0	104.0	27.9	84.1	164.5	82.2	184.8	89.8	166.9
Midgrade	103.3	4.8	103.2	5.2	113.5	4.8	90.2	11.5	88.5	12.8	95.2	11.4
Premium	111.4	3.9	111.2	4.3	120.8	3.8	94.7	25.4	93.7	26.6	99.5	22.3
Oxygenated	102.7	2.2	106.2	2.0	124.0	1.9	93.5	8.5	94.6	7.7	108.3	8.1
Regular	99.9	1.8	103.6	1.6	121.9	1.5	92.0	6.5	93.4	6.0	107.0	6.5
Midgrade	110.7	0.2	114.0	0.2	129.6	0.2	95.3	1.2	95.7	1.1	110.0	1.0
Premium	119.1	0.2	122.7	0.2	139.3	0.1	103.4	0.7	104.8	0.6	118.2	0.6
Reformulated	104.3	23.9	104.9	25.1	111.5	23.9	95.1	93.4	94.7	100.3	99.0	92.9
Regular	100.1	17.1	100.7	18.0	107.4	17.3	92.0	70.1	91.5	75.9	96.2	69.7
Midgrade	111.1	3.3	111.7	3.5	118.2	3.2	102.4	7.5	102.8	7.9	105.5	8.0
Premium	118.6	3.5	119.1	3.6	126.1	3.3	105.4	15.8	105.7	16.4	108.9	15.2
Aviation Gasoline	138.6	0.1	136.1	0.1	142.4	0.1	119.2	0.6	115.5	1.0	132.0	0.6
Kerosene-Type Jet Fuel	82.9	50.0	75.2	51.1	82.4	45.2	81.6	13.7	74.0	11.2	80.2	17.2
Propane (Consumer Grade)	46.9	2.3	41.5	1.7	43.7	5.4	47.1	27.3	41.5	28.4	46.4	31.5
Kerosene	NA	0.0	79.8	0.1	94.9	0.1	87.4	1.2	76.4	1.4	80.1	2.3
No. 1 Distillate	93.4	0.2	85.1	0.2	100.5	0.2	95.2	0.6	84.9	0.3	99.0	0.6
No. 2 Distillate	86.3	21.1	78.6	22.4	89.4	23.6	82.8	122.7	75.0	125.5	83.4	123.2
No. 2 Fuel Oil	82.8	2.1	73.4	3.1	88.8	2.1	78.3	20.0	71.3	18.3	78.7	19.2
No. 2 Diesel Fuel	86.7	19.0	79.4	19.3	89.5	21.4	83.6	102.7	75.7	107.2	84.2	104.0
Low Sulfur	89.0	12.9	81.7	13.2	91.4	14.4	84.1	91.7	76.1	95.1	84.8	91.0
High Sulfur	81.9	6.1	74.7	6.1	85.4	7.1	79.8	11.0	72.2	12.1	80.2	13.0
No. 4 Fuel^a	71.0	0.2	68.2	0.4	60.5	0.2	68.9	0.0	62.3	0.0	65.6	0.1
Residual Fuel Oil	63.6	9.6	61.4	10.5	53.3	12.6	58.5	7.0	58.2	9.7	48.9	7.5
Sulfur Content not > 1 %	67.3	2.1	67.4	2.8	62.2	2.4	62.1	3.1	60.6	5.2	51.2	4.7
Sulfur Content > 1 %	62.6	7.5	59.2	7.7	51.2	10.2	55.6	3.9	55.3	4.4	44.9	2.7

NA = Not available.

^a Includes No. 4 fuel oil and No. 4 diesel fuel.

Notes: Motor gasoline averages and totals prior to October 1993 include leaded gasoline.

Notes: Values shown for the current month are preliminary. Values shown for previous months are revised. Data are final upon publication in the *Petroleum Marketing Annual*.

Source: Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

ing the last week of the month. Crude oil futures prices at NYMEX hit 19-month highs on September 23. Due to high seas caused by the storm, the Louisiana Offshore Oil Port (LOOP) temporarily closed operations on September 21. The LOOP is a major point in the crude oil supply system in the United States, with more than 1 million barrels per day of crude oil passing through the facility from both foreign and domestic sources. Prices eased marginally after the threat of Tropical Storm Isidore passed, but in less than a week's time another storm, Lili, reached hurricane status. This storm was predicted to make landfall on the Gulf Coast in the early days of October, forcing another round of personnel evacuations. Due in part to the inclement weather, U.S. crude oil stocks were estimated to have fallen to about 275 million barrels during the last full week of the month. On average for the month, crude oil stocks

fell 2.3 percent from August's level, while distillate stocks dropped 2.8 percent. September inventories of finished gasoline show only a very slight increase from August levels despite a 6.1 percent drop in demand.

Additional September market and sales activity for crude oil and the principal petroleum products are summarized in the following sections.

Crude Oil

In addition to ongoing pressure from the threat of war with Iraq and falling inventories, storms in the Gulf of Mexico underpinned increases in the daily spot price for West Texas Intermediate (WTI) crude oil at Cush-

ing, Oklahoma during September. After opening at \$28.97 per barrel, the price immediately dropped to its monthly low of \$27.76 on September 3. The decline was caused by news of diplomatic efforts between Iraq and the United Nations, OPEC overproduction, and announced production increases from Norway and Mexico beginning next year. However, the price returned to an upward track in response to reports of declining stock levels and renewed concerns of war with Iraq. The price reached its high of \$30.85 per barrel on September 23 as Tropical Storm Isidore threaten supply and refining facilities in, and along the coast of the Gulf of Mexico. With another storm, Lili, threatening the same region shortly thereafter, the price remained near the month's high point, closing September at \$30.59 per barrel.

- Monthly average crude oil prices increased in all categories again in September. The average domestic crude oil first purchase price rose \$1.32 (5.3 percent), to \$26.08 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil rose \$1.12 (4.5 percent), to \$25.76 per barrel. The average landed cost of foreign crude oil increased \$1.02 (3.9 percent), to \$26.97 per barrel.
- The average refiner acquisition cost for domestic crude oil saw the largest increase, rising \$1.56 (5.8 percent), to \$28.43 per barrel. The average cost of imported crude oil to U.S. refiners climbed \$1.37 (5.3 percent), to \$27.14 per barrel. The composite refiner acquisition cost for crude oil increased \$1.44 (5.5 percent), to \$27.68 per barrel.

Petroleum Products

Motor Gasoline

During September, the movement of the daily spot price for regular gasoline at New York Harbor continued to be moderated by ample stocks. After opening at 77.3 cents per gallon, the price immediately decreased, dropping to the month's low of 71.2 cents per gallon on September 3. Following the general upward trend seen in the complex after that point, the price reached its high of 80.9 cents per gallon on September 24, as refineries along the Gulf Coast were threatened by Tropical Storm Isidore. Easing slightly during the final days of the month, the price closed September at 79.7 cents per gallon, 2.4 cents higher than where it began.

- September national average gasoline prices show only small changes from last month's levels. The average price for retail sales of motor gasoline by refiners remained flat at \$1.001 per gallon. The average wholesale price rose 1.5 cents to 88.9 cents per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets inched up 0.5 cent to 99.8 cents per gallon. The average wholesale price rose 1.6 cents to 88.8 cents per gallon. The average dealer tank wagon (DTW) price increased 0.7 cent to 93.9 cents per gallon, while the average rack price climbed 1.6 cents to 87.6 cents per gallon. The average price for bulk sales rose 2.6 cents to 79.7 cents per gallon. Reformulated gasoline (RFG) prices were 6.3 cents higher than conventional gasoline prices at retail, and 7.2 cents more at wholesale. Oxygenated gasoline prices were 7.9 cents more than conventional gasoline prices at retail, and 7.4 cents higher at wholesale.
- Following the end of the summer driving season, refiner gasoline sales fell in September. Total sales declined 33.2 million gallons per day (8.3 percent), to an average of 365.7 million gallons per day. Retail sales dropped 4.3 million gallons per day (6.5 percent), while wholesales declined 28.9 million gallons per day (8.7 percent). Rack sales made up 64.8 percent of wholesales, while DTW and bulk sales made up 21.2 percent and 14.0 percent, respectively. Reformulated gasoline constituted 32.1 percent of total motor gasoline sales, while oxygenated gasoline accounted for 2.9 percent of sales.

No. 2 Distillate

At New York Harbor, the daily spot price for No. 2 heating oil continued to show robustness during September. After opening at 74.9 cents per gallon, the price dropped to its low following the long Labor Day weekend, dropping to 71.6 cents per gallon, on September 3. It recovered from the decline quickly, matching other products' price trends, particularly that of crude oil. The price reached its high of 79.7 cents per gallon on September 25. Closing the month at 79.2 cents per gallon, the price was more than 4 cents higher than where it began September.

- In September, No. 2 distillate prices rose in all sales categories. The national average residential sales price for No. 2 distillate increased 6.0 cents to \$1.098 per gallon. The average wholesale price rose 7.7 cents to 83.4 cents per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets

climbed 7.5 cents, while the average No. 2 diesel fuel wholesale price increased 7.9 cents. The spread between low- and high-sulfur diesel fuel prices was 2.5 cents at retail and 3.3 cents at wholesale.

- Refiner sales of No. 2 distillate were mixed in September. Total sales fell 4.1 million gallons (2.8 percent), to 143.8 million gallons per day. Sales of No. 2 fuel oil rose 700,000 gallons per day (3.3 percent), while sales of No. 2 diesel fuel dropped 4.8 million gallons per day (3.8 percent). Low-sulfur diesel fuel accounted for 85.9 percent of all refiner diesel fuel sales, and 72.7 percent of all refiner No. 2 distillate sales.

Residual Fuel Oil

- September residual fuel oil prices generally increased from August levels. Refiner prices for low-sulfur residual fuel oil fell 0.1 cent to 67.3 cents per gallon at retail, but rose 1.5 cents to 62.1 cents per gallon at wholesale. The average retail price for high-sulfur residual fuel oil increased 3.4 cents to 62.6 cents per gallon, while the wholesale price inched up 0.3 cent to 55.6 cents per gallon. Including data reported by a sample of residual fuel oil marketers, the average low-sulfur residual fuel oil price rose 0.8 cent to 62.9 cents per gallon at retail, while the wholesale price increased 2.1 cents to 62.3 cents per gallon. The retail price for high-sulfur residual fuel oil climbed 3.5 cents to 62.2 cents per gallon,

while the wholesale price increased 2.9 cents to 56.6 cents per gallon.

- Refiner sales of residual fuel oil declined in September. Total sales fell 3.6 million gallons per day (17.8 percent) to 16.6 million gallons per day. Low-sulfur residual fuel sales decreased 2.8 million gallons (35.0 percent), while high-sulfur residual fuel oil sales slipped 700,000 gallons (5.8 percent).

Other Products

- Prices for the remaining surveyed products, generally rose in September, appreciably in some cases. Refiner propane prices climbed 5.4 cents per gallon at retail, and 5.6 cents per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price increased 2.9 cents per gallon, while the average retail price rose 2.2 cents. The average wholesale price increased 5.4 cents. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, No. 1 distillate, and No. 4 distillate rose at both levels.
- Refiner sales of these products were varied in September. Sales of propane rose at retail but fell at wholesale, while kerosene-type jet fuel sales did just the opposite. Sales of aviation gasoline, kerosene, and No. 4 distillate decreased both levels, while sales of No. 1 distillate rose at both the retail and wholesale levels.